WHAT IS CLAIMED IS:

1. A system comprising a control unit that receives a data set that is too large to display on a display of finite dimensions, the control unit mapping at least a displayable portion of data points contained in the data set onto the display by applying a mathematical equation comprising a nonlinear and continuous mathematical function having a finite range and at least one independent variable of infinite domain, the displayable portion of the data points being displayable on the display, the displayable portion being determined by selecting one of the data points in the data set to correspond to a reference position on the display, the data set being traversed on the display by changing the selected data point that corresponds to the reference position.

2. The system as in Claim 1, wherein a first displayable portion of the data set is replaced with a second displayable portion of the data set when traversed.

3. The system as in Claim 2, wherein data points in the data set between the data point corresponding to the reference position for the first displayable portion and the data point corresponding to the reference position for the second displayable portion traverse the displayable portion of the display in a continuous and non-linear manner in accordance with the mathematical function when traversed.

4. The system as in Claim 1, wherein the reference position is a central position of the displayable portion of data points on the display.

5. The system according to claim 1, wherein the amount of data of the data set included in the displayable portion is adjustable in a nonlinear fashion in accordance with the mathematical function by adjusting one or more parameters of the mathematical function for scaling the mathematical function.

6. The system as in Claim 1, wherein the data set comprises data points that are unbounded in at least one of magnitude and number.

7 The system as in Claim 1, wherein the control unit maps data points of the data set onto the display as the at least one independent variable of the mathematical function.

8. The system as in Claim 1, wherein the data set is too large to display due to the number of data points in the data set.

9. The system as in Claim 1, wherein the data set is too large to display due to the range of data points in the data set.

10. The system according to Claim 1, wherein the data set is one-dimensional and the data set is mapped onto the display as the at least one independent variable of the function.

11. The system according to Claim 1, wherein the data set is multi-dimensional and at least one dimension of the data set is mapped onto the display as the at least one independent variable of the function.

12. The system according to Claim 1, wherein the range of the mathematical equation is completely displayable on the display.

13. The system according to claim 1, wherein the displayable portion is mapped on an axis of the display and the scale of the axis continually changes.

14. The system according to claim 13, wherein the mapping provides a relatively expanded scale for the data mapped about the midpoint of the displayable portion, and a continually reduced scale on each side of the midpoint of the displayable portion as the mapping approaches ends of the axis.

15. The system according to claim 1, wherein the system further includes a user interface that provides input to the control unit, wherein the user interface allows the user to do at least one of entering at least some of the data points of the data set,

changing the parameters of the mathematical equation and selecting the displayed data points.

16. The system as in Claim 15, wherein the user interface comprises a GUI.

17. The system as in Claim 16, wherein the mathematical equation has a finite range over the data set due to the mathematical function; and wherein the display displays at least one axis corresponding to the finite range of the mathematical equation and displays at least the displayable portion of the mapped data points on the axis.

18. The system according to claim 17, wherein the axis is marked and labeled at selectable and variable intervals to indicate the placement of values of displayable data points displayed on the axis.

19. The system according to claim 1, wherein the mathematical function is one selected from the group of arc tan, cot, tanh and $\sinh^{-1}$.

20. The system according to Claim 1, wherein the data set is traversed in a nonlinear and continuous fashion across the displayable portion in accordance with the mathematical function upon continuous selection of consecutive data points as the data point corresponding to the reference position on the display.

21. The system according to Claim 20, wherein at least a portion of the consecutive data points are used as a reference position parameter in the mathematical function to calculate consecutive displayable portions of the data set in order to traverse the data set across the displayable portion in the nonlinear and continuous fashion.

22. A method for displaying on a display of finite dimensions a data set of extent too large to display on the display comprising the steps of accessing a data set that is too large to display on a display of finite dimensions; mapping at least a displayable portion of data points contained in the data set onto the display by applying a mathematical equation comprising a nonlinear, continuous mathematical function having a finite range and at least one independent variable of infinite domain; displaying the displayable portion of the data points on the display; and traversing the data set on the display in a nonlinear and continuous fashion in accordance with the mathematical function by selecting one or more data points in the data set to correspond to a reference position on the display.

23. A software application for processing a data set that is too large to display on a display of finite dimensions, the software application mapping at least a displayable portion of data points contained in the data set onto a finite extent corresponding to the display by applying a nonlinear and continuous mathematical equation comprising a mathematical function having a finite range and at least one independent variable of infinite domain, the mapped values of the displayable portion of the data points being output for display, the software application receiving an input of a selected data point

that corresponds to a reference position on the display, the software application using the selected data point and the reference position to determine the remaining data points comprising the displayable portion, the software application outputting for display mapped values of data points in the data set corresponding to the displayable portion.

24. The software application according to claim 23, wherein the scale of the displayable portion is adjusted in a nonlinear and continuous fashion in accordance with the mathematical function by receiving an adjustment input that adjusts a parameter of the mathematical function.

25. The software application as in Claim 23, wherein the data set comprises data points that are unbounded in at least one of number and magnitude.

26. The software application as in Claim 23, wherein the software application maps the data points corresponding to the displayable portion as the at least one independent variable of the mathematical function.

27. The software application as in Claim 23, wherein the data set is too large to display due to one of the range and number of data points in the data set.

28 The software application according to claim 23, wherein the software application receives input from a user interface, the user interface allowing the user to input at

least one of 1) one or more data points of the data set, 2) a change of a parameter of the mathematical equation and 3) a selection of the displayed data points.

29. The software application as in Claim 23, wherein mathematical equation has a finite range over the data set due to the mathematical function, the mapped outputs of the software application are formatted for a display that displays at least one axis corresponding to the finite range of the mathematical equation and displays at least the displayable portion of the mapped data points on the axis.

30. The software application according to claim 23, wherein the mathematical function is one selected from the group of arc tan, cot, tanh and $\sinh^{-1}$.

31. The software application according to claim 23, wherein the software application receives a continuous selection of consecutive data points as the data points corresponding to the reference position on the display and outputs mapped values of the data set to the corresponding displayable portion in a continuous fashion in accordance with the mathematical function, wherein the data set is traversed in a nonlinear and continuous fashion.

32. A server running a software application for processing a data set that is too large to display on a display of finite dimensions, the software application mapping at least a displayable portion of data points contained in the data set by applying a nonlinear and continuous mathematical equation comprising a mathematical function having a

finite range and at least one independent variable of infinite domain, the mapped values of the displayable portion of the data points being output for display, the software application receiving an input of a selected data point that corresponds to a reference position on the display, the software application using the selected data point and the reference position to determine the remaining data points comprising the displayable portion, the software application outputting for display mapped values of data points in the data set for the corresponding displayable portion in accordance with the mathematical function.

33. The server as in Claim 32, wherein the server is a remote server in communication with a local server, the remote server receiving input parameters delineating the displayable portion of the data set by a user at the local server, the remote server outputting to the local server a mapping of the displayable portion of the data set.

34. The server as in Claim 32, wherein the server is a remote server in communication with a local server, the remote server receiving an input corresponding to the selected data point by a user at the local server, the remote server outputting to the local server mapped values of data points in the data set being traversed in a nonlinear and continuous fashion in accordance with the mathematical function.

35. The software application according to claim 32, wherein the software application receives a continuous selection of consecutive data points as the data points corresponding to the reference position on the display and outputs mapped values of the data set to the corresponding displayable portion in a continuous fashion in accordance with the mathematical function, wherein the data set is traversed in a nonlinear and continuous fashion.

36. The server as in Claim 32, wherein the server is a remote server of a website, the data set being generated at the website.

37. The server as in Claim 32, wherein the server is a local server in communication with a remote server of a website, the data set being provided to the local server from the remote server.

38. A system comprising a control unit that receives a data set that is too large to display on a display of finite dimensions, the control unit mapping at least a displayable portion of data points contained in the data set onto the display by applying at least a combination of linear continuous mathematical functions, at least one of the linear mathematical functions serving to model a nonlinear continuous mathematical function, the modeling serving to map onto the display a portion of the data set that is too large to display.